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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,147	08/02/2007	Takefumi Yoshida	358362011200	5089

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EXAMINER	
MCCULLEY, MEGAN CASSANDRA	
ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,147	YOSHIDA ET AL.	
	Examiner	Art Unit	
	Megan McCulley	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,8,11,13 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,8,11,13 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/17/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-5, 8, 11, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. (U.S. Pat. 5,866,668) as applied to claim 1 above and in view of Karkozov et al. (SU 852914). The English language translation of this document is used for the citations below.

Regarding claim 1: Maeda et al. teaches a liquid multifunctional epoxy resin (col. 4 lines 8-34) and solid particles of diamines (col. 2 line 54-col. 3 line 5).

Not disclosed is the compound having two or more amino groups in a molecule is an aromatic amine compound having a benzoxazole structure. However, Karkozov et al. teaches an epoxy composition comprising a benzoxazole structure (page. 3). Maeda et al. and Karkozov et al. are combinable because they are both concerned with the same field of endeavor, namely epoxy resin adhesives with solid diamine curing agents. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the benzoxazole compound of Karkozov et al. with the composition of Maeda et al. and would have been motivated to do so since Karkozov et al. states that the use of the benzoxazole as a curing agent raises the pot life and the heat

resistance compared with compositions using 4,4-diaminodiphenyl methane and m-phenylene-diamine, which is used by Maeda et al. (pages 2 and 3).

Regarding claim 3: Maeda et al. teaches the epoxy resin is liquid (col. 4 lines 8-34).

Regarding claims 4 and 8: Maeda et al. teaches a solvent such as toluene (col. 2 line 32), which has a boiling point of 110.06 °C.

Regarding claims 5, 11, 13 and 15: Maeda et al. teaches the solid particles have a size of less than 20 μm (col. 3 lines 1-5), which overlaps the claimed range.

Response to Arguments

Applicant's arguments filed November 17, 2008 have been fully considered but they are not persuasive, because:

A) Applicant's argument that the combination of Maeda et al. and Karkozov et al. would render the invention of Maeda et al. unsatisfactory for its intended purpose is not persuasive. Although Maeda et al. is concerned with low-temperature curing, Karkozov et al. is also (page 2 lines 14-17). At close inspection of Maeda et al., it is not the melting of the solid amine that starts the curing reaction, but the surface coating on the amine (col. 1 lines 50-60). The amine does not need to be melted in order for the composition to cure. Therefore, it is not germane what the melting point of the diamine is. For the invention of Maeda et al., it is this surface coating the keeps the epoxy and the amine from reacting until curing is desired. Further, the composition of Karkozov et

al. can be cured at 140 °C, which can be considered a low temperature cure for epoxy resins in the prior art, see U.S. Pat. 6,309,527 col. 2 lines 10-15.

B) Applicant's argument that the compositions of the references are not of the same field of endeavor is not persuasive. Maeda et al. and Karkozov et al. are both concerned with epoxy resin compositions. The fact that Maeda et al. has additional components not claimed is not germane since the instant claims state "comprising" which indicates other components may be present. Since the required compounds are present, the reaction will take place.

C) Applicant's argument that the combination would require the composition to be heated to 140 °C in order to add the APBO, as in Karkozov et al., and therefore would not necessarily work with the composition of Maeda et al. is not persuasive. Karkozov et al. adds the APBO at 140 °C in order to have a liquid composition. The reference teaches this is the temperature the amine dissolves in the epoxy. This is further proof that the APBO is solid at ordinary temperatures. However, Maeda et al. requires a latent curing agent in solid form. Maeda et al. is the primary reference. The combination with Karkozov et al. utilizes the teaching of the superior APBO curing agent. It is immaterial that the method steps of the references are different since it is the composition that is claimed. The method steps are not the teaching of Karkozov et al. that is being combined with Maeda et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/M. M./
Examiner, Art Unit 1796